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| FROM | Applied Photo Science Division, TSSG | DATE | 10 June 1970 |
|------|---|------|--------------|

| TO | INITIALS | DATE | REMARKS |
|-----------------|--------------|------|--|
| DIRECTOR | 4 | 6/30 | |
| DEP/DIRECTOR | 3 | 6/23 | 1-2 FYI |
| EXEC/DIRECTOR | 2 | 6/11 | |
| SPECIAL ASST | 1 | 6/11 | |
| ASST TO DIR | 5 | 6/23 | Report from [redacted] on the SA-5 measurement problem |
| ASST TO DEP DIR | 6 | | |
| CH/PPBS | | | |
| DEP CH/PPBS | | | |
| EO/PPBS | | | |
| CH/IEG | | | |
| DEP CH/IEG | | | |
| EO/IEG | | | |
| CH/PSG | | | |
| DEP CH/PSG | | | |
| EO/PSG | | | |
| CH/TSSG | | | |
| DEP CH/TSSG | | | |
| EO/TSSG | | | |
| CH/SSD/TSSG | | | |
| PERSONNEL | | | |
| LOGISTICS | | | |
| TRAINING | | | |
| RECORDS MGT | | | |
| SECURITY | | | |
| FINANCE | | | |
| DIR/IAS/DDI | | | |
| CH/DIAXX-4 | | | |
| CH/DIAAP-9 | | | |

Handwritten notes:

- Report from [redacted] on the SA-5 measurement problem*
- AEM: I'd like to talk to all these con'ts plus [redacted] early next week.*
- 16 June - Told [redacted] we cannot help him get to 1/10 of a foot.*

AEM

Stout, M. J.

SECRET

TSSG/APSD-061/70
10 June 1970

MEMORANDUM FOR: Executive Director, NPIC

SUBJECT: Meeting with [] OSI,
on 8 June 1970

1. The following personnel attended an impromptu meeting in [] office (4G01) at Headquarters:

[] TSSG/APSD - Photogrammetrist.

Knowledgeable of the [] math model and of most Center work in error propagation.

[] TSSG/APSD - Photo Scientist.

Knowledgeable in microdensitometry, special target displays and of image enhancement techniques.

[] - TSSG/APSD - Photo Scientist.

Knowledgeable of the [] hardware, reproduction emulsions and color films.

[] - IEG/PHD - Photogrammetrist.

Knowledgeable in mensuration, use of ground truth and in human factor problems inherent in mensuration.

[] - CIA/IAS - Photo Interpreter.

Thoroughly familiar with [] requirement.

[] - IEG/MSD - Photo Interpreter.

Familiar with [] requirement.

GROUP 1
Excluded from automatic
downgrading and
declassification

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TSSG/APSD-061/70

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SUBJECT: Meeting with [] OSI, on
8 June 1970

2. Discussions centered around whether specially devised CORN-type ground truth target arrays would provide information on threshold cut-offs below which accurate measurements could not be provided. The overriding fact concerning the inability to produce more accurate measurements, is that the major contributor to the variance in measuring the diameter of a specific small object is the human error occurring in lining up the crosshairs of a comparator with the edge of the object. Until this error is better understood, there is little probability that NPIC can further refine the figures presented to [] Comments also included the possibility of using color films, the effects of color correcting the lens, the possible use of microdensitometry, image enhancement techniques, and the problems of measuring very small images. The NPIC personnel cautioned [] on the difficulties of obtaining coverage of specific ground truth targets displayed for [] acquisitions. The probability is that many targets would have to be provided for display, and be covered on several missions. The "Drum" Study was alluded to and the difficulties in acquiring good coverage was surfaced. The proposed targets and consequent acquisition could be extremely expensive and would probably not provide any greater measurement accuracy, since the mensurationist's pointing errors would still remain the major contributor to measurement variance of objects in the size range necessary to answer requirements similar to []

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3. No conclusions were actually documented at the meeting other than the fact that the dimensions initially provided [] are the best NPIC and CIA/IAS can do at the present time. The NPIC participants are of the opinion that little can be gained by following through on the ground truth target display suggested by [] The expense of designing, displaying and acquiring sufficient

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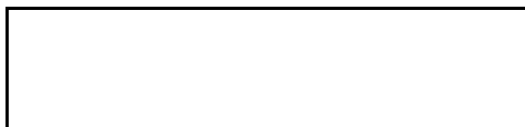
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TSSG/APSD-061/70

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SUBJECT: Meeting with [REDACTED] OSI, on
8 June 1970

coverage of such targets may be prohibitive - and would not solve the initial problem of the mensurationist not being able to accurately determine where the edge of an object lies.



Deputy Chief
Applied Photo Science Division
TSSG/NPIC

Distribution:

Orig - Addressee
1 - NPIC/TSSG
1 - NPIC/TSSG/APSD

1- IEG

1- IAI

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